



NOAA OFFICE OF OCEAN EXPLORATION AND RESEARCH

Final Project Instructions

Date Submitted: June 03 , 2013

Platform: NOAA Ship *Okeanos Explorer (EX)*

Cruise Number: EX-13-03

Project Title: New England Seamount Chain Exploration

Cruise Dates: June 11, 2013 – June 29, 2013

Prepared by: Adam D. Skarke
Physical Scientist / Hydrographer
Office of Ocean Exploration & Research

Approved by: _____ Dated: _____
Craig W. Russell, NOAA
Program Manager
Office of Ocean Exploration & Research

Approved by: _____ Dated: _____
CAPT Anita L. Lopez, NOAA
Commanding Officer
Marine Operations Center – Atlantic

I. OVERVIEW

A. Cruise Period

EX-13-03 operations will commence on June 11, 2013 at North Kingstown, RI and conclude on June 29, 2013 at North Kingstown, RI. The planned transit and survey line is 3,937 nautical miles (NM) and is expected to require 18.2 days at an average speed of 9 knots (figure 1). Multibeam and single beam mapping operations will be conducted 24 hours a day during the transit. Sub-bottom profile mapping will be conducted each day between the hours of 1000 and 1800.

B. Operating Area

The operating area is the Western North Atlantic Ocean with a focused survey area approximately 500 NM east of Cape May, NJ and 300 NM south of Halifax, NS (Figure 1).

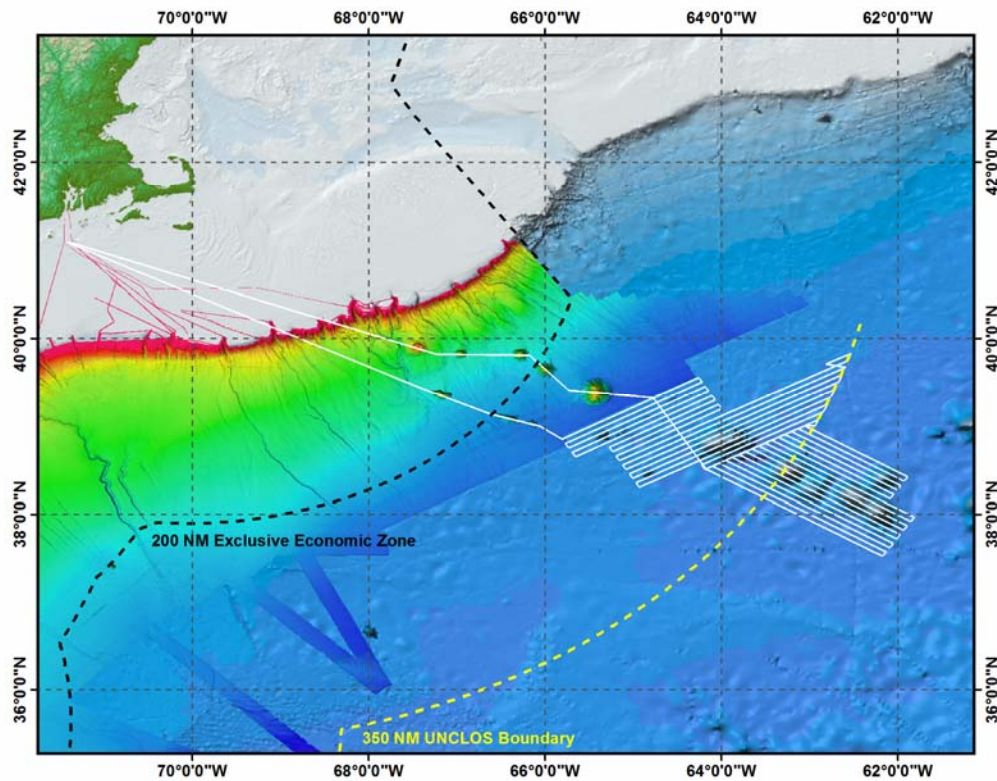


Figure 1: EX-13-03 operating area with cruise track (white line) over the New England Seamount Chain. The track is 3937 NM long and will require approximately 18.2 days at a speed of 9 knots. The actual cruise track is subject to change due to weather and survey conditions. Bathymetric data courtesy of GEBCO, The US ECS Project and NOAA.

EX-13-03 Transit Waypoints (approximate)		
Latitude	Longitude	Remarks
41 05.453 N	071 25.083 W	Narragansett Bay Outbound <i>RW "NB"</i>
39 26.877 N	067 23.564 W	
39 08.811 N	066 35.766 W	
39 00.251 N	066 01.605 W	
38 51.408 N	065 46.483 W	
39 33.608 N	064 13.531 W	
39 30.556 N	064 11.279 W	
38 48.367 N	065 44.239 W	
38 45.335 N	065 41.959 W	
39 27.506 N	064 09.029 W	
39 24.456 N	064 06.784 W	
38 42.326 N	065 39.659 W	
38 39.304 N	065 37.377 W	
39 21.404 N	064 04.545 W	
39 18.346 N	064 02.301 W	
38 45.881 N	065 14.306 W	
38 42.865 N	065 12.050 W	
39 15.297 N	064 00.073 W	
39 12.250 N	063 57.822 W	
38 39.820 N	065 09.772 W	
38 36.790 N	065 07.515 W	
39 45.320 N	062 32.006 W	
39 50.178 N	062 29.987 W	
39 42.950 N	062 47.048 W	
39 40.711 N	062 33.437 W	
38 33.756 N	065 05.254 W	
38 30.722 N	065 02.998 W	
39 35.599 N	062 36.041 W	
39 30.639 N	062 38.279 W	
38 27.688 N	065 00.716 W	
38 24.652 N	064 58.466 W	
39 25.577 N	062 40.756 W	
39 20.277 N	062 43.771 W	
38 21.639 N	064 56.200 W	

38 18.602 N	064 53.957 W	
39 15.437 N	062 45.705 W	
39 10.079 N	062 48.841 W	
38 33.748 N	064 11.609 W	
38 30.696 N	064 09.390 W	
39 04.610 N	062 52.225 W	
39 00.608 N	062 54.220 W	
39 00.608 N	063 01.565 W	
38 25.705 N	061 51.244 W	
38 22.748 N	061 53.657 W	
38 58.629 N	063 06.063 W	
38 56.676 N	063 10.560 W	
38 19.749 N	061 56.048 W	
38 16.780 N	061 58.420 W	
38 54.719 N	063 15.055 W	
38 52.762 N	063 19.542 W	
38 13.855 N	062 00.851 W	
38 10.890 N	062 03.270 W	
38 50.799 N	063 24.029 W	
38 48.834 N	063 28.505 W	
37 58.388 N	061 46.847 W	
37 55.441 N	061 49.249 W	
38 46.869 N	063 32.990 W	
38 44.896 N	063 37.461 W	
37 52.473 N	061 51.633 W	
37 49.513 N	061 54.026 W	
38 42.923 N	063 41.927 W	
38 40.947 N	063 46.393 W	
37 46.557 N	061 56.419 W	
37 43.594 N	061 58.804 W	
38 38.972 N	063 50.854 W	
38 36.987 N	063 55.311 W	
37 40.630 N	062 01.190 W	
37 37.670 N	062 03.568 W	
38 34.999 N	063 59.760 W	
38 33.009 N	064 04.214 W	
37 34.711 N	062 05.950 W	

37 31.746 N	062 08.321 W	
38 31.034 N	064 08.653 W	
39 19.830 N	064 44.492 W	
39 24.925 N	065 41.895 W	
39 49.024 N	066 08.649 W	
39 49.637 N	067 11.706 W	
41 05.843 N	071 21.851 W	Narragansett Bay Inbound RW "NB"

Table 1: *Approximate waypoints for EX-13-03 transit and survey. The actual cruise track is subject to modification due to prevailing weather conditions, the discretion of the Commanding Officer, or reprioritization arising from discoveries.*

C. Summary of Objectives

EX-13-03 will be focused on mapping the western extent of the New England Seamount Chain. Transit mapping operations will collect bathymetric, water column backscatter, and seafloor backscatter data over Balanus, Bear, Buell, Mytilus, Physalia, Panulirus, Picket, and Retriever Seamounts in accordance with request from the scientific community. Survey mapping operations will collect continuous bathymetric, water column backscatter, and seafloor backscatter data over Asterias, Atlantis II, Gosnold, Kelvin, Kiwi, and Sheldrake also in accordance with request from the scientific community. Additionally, survey mapping will complement existing data collected as part of the US Extended continental shelf program, and was designed in consultation with ECS scientists. In the event that weather precludes mapping at the primary working area, a contingency working area will be canyon heads and data holidays from EX1204 and EX1301 along the continental slope between Oceanographer Canyon and the UC/Canadian maritime territorial border.

During EX-13-03, multibeam and single beam data will be collected 24 hours a day and XBT casts will be conducted at an interval defined by prevailing oceanographic conditions, but not to exceed 6 hours. Additionally, sub bottom profile data will be collected 10hours a day. All data will be fully processed according to OER standard onboard procedures and will be archived with the National Geophysical Data Center. The following are mission objectives for EX-13-03 presented in order of priority.

1. Collect deep water multibeam sonar data (MBES)
 - a. Conduct 24-hr mapping operations for the duration of the cruise.
 - b. Collect bathymetric, seafloor backscatter, and water column backscatter data.
2. Collect ancillary sonar data
 - a. EK60 single beam sonar (24 hours/day)
 - b. Knudsen sub-bottom profiler (Daily between 1000 and 1800)

3. XBT operations
 - a. XBT casts will be collected at regular intervals of no more than 6 hours.
4. Conduct training of new personnel in all data collection and processing procedures (continuous throughout cruise).
 - a. Training of contractors/ physical scientists new to the ship (NOAA OCS and USACE)
 - b. Training of mapping interns (UCAR, EPP, and NOAA Hollings)
5. Testing of new/ modified mission hardware and software
6. Telepresence (VSAT 5 mb/s ship to shore; T1 shore to ship)
 - a. Test and refine ship-to-shore communications and operations procedures
 - b. Test and refine operating procedures and products
 - c. Maintain single live stream video from ship to shore

D. Participating Institutions

National Oceanic and Atmospheric Administration (NOAA) - Office of Ocean Exploration and Research (OER) - 1315 East-West Hwy, Silver Spring, MD 20910 USA

National Oceanic and Atmospheric Administration (NOAA) - Office of Coast Survey- 1315 East-West Hwy, Silver Spring, MD 20910 USA

National Oceanic and Atmospheric Administration (NOAA) - Office of Education- 14th St. & Constitution Ave NW, Washington, DC 20230 USA

University Corporation for Atmospheric Research Joint Office for Science Support (JOSS), PO Box 3000 Boulder, CO 80307 USA

University of New Hampshire (UNH) - Center for Coastal and Ocean Mapping (CCOM) - Jere A. Chase Ocean Engineering Lab, 24 Colovos Road, Durham, NH 03824 USA

E. Personnel (Science Party)

A full mapping complement is necessary for this cruise. Required mission personnel include a mapping lead/expedition coordinator as well as two qualified watchstanders for each of the three eight hour watches. The mapping lead is responsible for facilitating overall mapping operations, including participating in operational meetings, providing guidance for mapping/survey troubleshooting, and communicating status of mapping sensors to personnel on shore.

Name	Affiliation	Position	M/F	Status
Adam Skarke	NOAA OER (ERT Inc)	Expedition Coordinator / Mapping Lead	M	US Citizen
Bryan Cheaveau	NOAA OCS (AHB)	Mapping Watch Leader	M	US Citizen
Calvin Martin	USACE (HSS)	Mapping Watch Leader	M	US Citizen
Alena Chubet	UCAR	Mapping Watchstander/Intern	F	US Citizen
Judson Curtis	NOAA OED	Mapping Watchstander/Intern	M	US Citizen
Mali'o Kodis	NOAA OED	Mapping Watchstander/Intern	F	US Citizen
Elizabeth Novak	UCAR	Mapping Watchstander/Intern	F	US Citizen
Christopher Pfrommer	UCAR	Mapping Watchstander/Intern	M	US Citizen

Table 2: Full list of the science party members and their affiliation

F. Administrative

Key Points of Contact:

Ship Operations

Marine Operations Center, Atlantic (MOA)
439 West York Street
Norfolk, VA 23510-1145
Telephone: (757) 441-6776
Fax: (757) 441-6495

Acting Chief, Operations Division, Atlantic (MOA)
LTJG Laura Gibson
Telephone: (757) 441-6842
E-mail: ChiefOps.MOA@noaa.gov

Mission Operations

Adam Skarke, Expedition Coordinator
NOAA Office of Ocean Exploration
and Research (ERT, Inc)
Phone : (302) 981-9908/(603)862-0369
E-mail : Adam.Skarke@noaa.gov

CDR Ricardo Ramos, NOAA
Commanding Officer
NOAA Ship *Okeanos Explorer*
Phone: (401) 378-8284
Email: CO.Explorer@noaa.gov

Mashkoor Malik, Mapping Lead (shoreside)
NOAA Office of Ocean Exploration
and Research (ERT, Inc.)
Phone: (301) 734-1015/ (603)377-6319
E-mail: Mashkoor.Malik@noaa.gov

LT Laura Gallant, NOAA
Operations Officer
NOAA Ship *Okeanos Explorer*
Phone: (207) 240-0957 (c)
E-mail: Ops.Explorer@noaa.gov

Other Mission Contacts

Craig Russell, EX Program Manager
NOAA Ocean Exploration & Research
Phone: 206-526-4803 / 206-518-1068
E-mail: Craig.Russell@noaa.gov

LCDR Nicola VerPlanck,
NOAA Ocean Exploration & Research
Phone: 206-526-4801
E-mail: Nicola.Verplanck@noaa.gov

John McDonough, Acting Director
NOAA Ocean Exploration & Research
Phone: 301-734-1023 / 240-676-5206
E-mail: John.McDonough@noaa.gov

Webb Pinner, Telepresence Lead
NOAA Office of Ocean Exploration & Research
Phone: (401) 874-6250 (o) / (401) 330-9662 (c)
Email: Webb.Pinner@noaa.gov

Shipments

Send an email to the *Okeanos Explorer* Operations Officer at OPS.Explorer@noaa.gov indicating the size and number of items being shipped. All items should arrive at Davisville Depot prior to **COB May 31, 2013**.

Vessel shipping address:

ATTN: LT Laura Gallant
NOAA Ship *Okeanos Explorer*
2578 Davisville Rd.
North Kingstown, RI 02852

G. Diplomatic Clearances

NOT APPLICABLE TO THIS CRUISE

H. Licenses and Permits

See appendix C for categorical exclusion documentation

II. OPERATIONS

A. Cruise Plan Itinerary (*All times and dates are subject to prevailing conditions and the discretion of the commanding officer*)

Sunday, June 9

- Mission personnel arrive to ship, particularly air travelers

Monday, June 10

- Mission personnel orientation, ops meeting, and preparation for departure

Tuesday, June 11 - Saturday, June 29

- Transit mapping and survey mapping operations (24 hours/day)

Sunday, June 30

- Mission personnel depart ship in morning

B. Telepresence Events

There are no telepresence events anticipated during this leg.

C. In-Port Events

There are no in-port events scheduled for this cruise.

D. Staging and Destaging

NOT APPLICABLE TO THIS CRUISE

E. Sonar Operations

Multibeam Operations

Continuous EM 302 and EK 60 data acquisition is planned for this cruise. All data acquisition will be conducted in accordance with established standard operating procedures under the direction of the mapping team lead.

F. Dive Plan

NOT APPLICABLE TO THIS CRUISE

G. Applicable Restrictions

NOT APPLICABLE TO THIS CRUISE

III. EQUIPMENT

A. Equipment and capabilities provided by the ship

- Kongsberg Simrad EM302 Multibeam Echosounder (MBES)
- Kongsberg Simrad EK60 Deepwater Echosounder
- Knudsen Chirp 3260 Sub-bottom profiler (SBP)
- LHM Sippican XBT (various probes)
- Seabird SBE 911Plus CTD
- Seabird SBE 32 Carousel and 24 2.5 L Niskin Bottles
- Light Scattering Sensor (LSS)
- Oxidation – Reduction Potential (ORP)
- Dissolved Oxygen (DO) sensor
- Altimeter Sensor and battery pack
- CNAV GPS
- POS/MV
- Seabird SBE-45 (Micro TSG)
- Kongsberg Dynamic Positioning-1 System
- NetApps mapping storage system
- CARIS HIPS Software
- IVS Fledermaus Software
- SIS Software
- Hypack Software
- Scientific Computing System (SCS)
- ECDIS
- Met/Wx Sensor Package
- Telepresence System
- VSAT High-Speed link (Comtech 5 Mbps ship to shore; 1.54 Mbps shore to ship)
- Cruise Information Management System (CIMS)

B. Equipment and capabilities provided by the scientists

Solar Light Company Microtops II Sun Photometer. Provided by NASA Maritime Aerosol Network Program (See section V subsection A “Supplementary Projects” for details)

IV. HAZARDOUS MATERIALS

A. Policy and Compliance

The Expedition Coordinator is responsible for complying with DMS, Fleet Environmental Compliance #07, Hazardous Material and Hazardous Waste Management Requirements for Visiting Scientists, released July 2002. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

By Federal regulations and NOAA Marine and Aviation Operations policy, the ship may not sail without a complete inventory of all hazardous materials by name and the anticipated quantity brought aboard, MSDS and appropriate neutralizing agents, buffers, and/or absorbents in amounts adequate to address spills of a size equal to the amount of chemical brought aboard. The amount of hazardous material arriving and leaving the vessel shall be accounted for by the Expedition Coordinator.

B. Radioactive Isotopes

NOT APPLICABLE TO THIS CRUISE

C. Inventory

NOT APPLICABLE TO THIS CRUISE

V. ADDITIONAL PROJECTS

A. Supplementary Projects

NASA Maritime Aerosol Network

During the cruise the marine aerosol layer observations will be collected for the NASA Maritime Aerosol Network (MAN). Observations will be made by mission (mapping interns) or NOAA (ENS Keith) personnel with a sun photometer instrument provided by the NASA MAN program. Resulting data will be delivered to the NASA MAN primary investigator Alexander Smirnov by the expedition coordinator. All collected data will be archived and publically available at: http://aeronet.gsfc.nasa.gov/new_web/maritime_aerosol_network.html

B. NOAA Fleet Ancillary Projects

NOT APPLICABLE TO THIS CRUISE

VI. DISPOSITION OF DATA AND REPORTS

A. Data Responsibilities

All data acquired on *Okeanos Explorer* will be provided to the public archives without proprietary rights. All data management activities shall be executed in accordance with NAO 212-15, Management of Environmental and Geospatial Data and Information [http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_212/212-15.html].

Ship Responsibilities

The Commanding Officer is responsible for all data collected for missions until those data have been transferred to mission party designees. Data transfers will be documented on NOAA Form 61-29. Reporting and sending copies of project data to NESDIS (ROSCOP form) is the responsibility of OER.

NOAA OER Responsibilities

The Expedition Coordinator will work with the *Okeanos Explorer* Operations Officer to ensure data pipeline protocols are followed for final archive of all data acquired on *Okeanos Explorer* without proprietary rights.

Deliverables

- a. At sea
 - Daily plans of the Day (POD)
 - Daily situation reports (SITREPS)
 - Daily summary bathymetry data files
- b. Post cruise
 - Refined SOPs for all pertinent operational activities
 - Assessments of all activities
- c. Science
 - Multibeam and XBT raw and processed data (see appendix B for the formal cruise data management plan)
 - Mapping data report

Archive

- The OER Program and ship will work together to ensure documentation and stewardship of acquired data sets in accordance with NAO 212-15. The Cruise Information Management System is the primary tool used to accomplish this activity.

B. Pre and Post Cruise Meeting

Pre-Cruise Meeting

Prior to departure, the Operation's Officer will conduct a meeting of the scientific party to inform them of cruise objectives and vessel protocols, e.g., meals, watches, etiquette, etc.

Post-Cruise Meeting

Upon completion of the cruise, a meeting will be held by the Operation's Officer and attended by the ship's Survey Technicians, the Expedition Coordinator and members of the scientific party to review the cruise. Concerns regarding safety, efficiency, and suggestions for improvements for future cruises should be discussed.

Shipboard Meetings

Daily Operations Briefing meetings will be held at 1500 in the forward lounge to review the current day, and define operations, associated requirements, and staffing needs for the following day. A Plan of the Day (POD) will be posted each evening for the next day in specified locations throughout the ship. A safety brief and overview of POD will occur on the Bridge each morning at 0800. Daily Situation Reports (SITREPS) will be posted as well and shared daily through e-mail and/or the EX PLONE site (<http://tethys.gso.uri.edu/OkeanosExplorerPortal>).

C. Ship Operation Evaluation Report

Within seven days of the completion of the cruise, a Ship Operation Evaluation form is to be completed by the Expedition Coordinator and lead scientist. The preferred method of transmittal of this form is via email to OMAO.Customer.Satisfaction@noaa.gov. If email is not an option, a hard copy may be forwarded to:

Director, NOAA Marine and Aviation Operations
NOAA Office of Marine and Aviation Operations
8403 Colesville Road, Suite 500
Silver Spring, MD 20910

VII. MISCELLANEOUS

A. Meals and Berthing

Meals and berthing are required for eight mission personell. Meals will be served 3 times daily beginning one hour before scheduled departure, extending throughout the cruise, and ending two hours after the termination of the cruise. Since the watch schedule is split between day and night, the night watch may often miss daytime meals and will require adequate food and beverages (for example a variety of sandwich items, cheeses, fruit, milk, juices) during what are not typically meal hours. Special dietary requirements for scientific participants will be made available to the ship's command at least twenty-one days prior to the survey (e.g., Expedition Coordinator is allergic to fin fish). Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the Expedition Coordinator. The Expedition Coordinator and Operations Officer will work together on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current make-up of the ship's complement. The Expedition Coordinator is responsible for ensuring the scientific berthing spaces are left in the condition in which they were received; for stripping bedding and linen

return; and for the return of any room keys which were issued. The Expedition Coordinator is also responsible for the cleanliness of the laboratory spaces and the storage areas utilized by the scientific party, both during the cruise and at its conclusion prior to departing the ship.

All NOAA scientists will have proper travel orders when assigned to any NOAA ship. The Expedition Coordinator will ensure that all non NOAA or non Federal scientists aboard also have proper orders. It is the responsibility of the Expedition Coordinator to ensure that the entire scientific party has a mechanism in place to provide lodging and food and to be reimbursed for these costs in the event that the ship becomes uninhabitable and/or the galley is closed during any part of the scheduled project.

All persons boarding NOAA vessels give implied consent to comply with all safety and security policies and regulations which are administered by the Commanding Officer. All spaces and equipment on the vessel are subject to inspection or search at any time. All personnel must comply with OMAO's Drug and Alcohol Policy dated May 7, 1999 which forbids the possession and/or use of illegal drugs and alcohol aboard NOAA Vessels.

B. Medical Forms and Emergency Contacts

The NOAA Health Services Questionnaire (NHSQ, Revised: 08/08) must be completed in advance by each participating scientist. The NHSQ can be obtained from the Expedition Coordinator or the NOAA website at [NOAA HEALTH SERVICES QUESTIONNAIRE](http://www.oma.noaa.gov/medical/NHSQ_Final_wi_Instructions_fill.pdf) found at http://www.oma.noaa.gov/medical/NHSQ_Final_wi_Instructions_fill.pdf. The completed form should be sent to the Regional Director of Health Services at Marine Operations Center. The participant can mail, fax, or scan the form into an email using the contact information below. The NHSQ should reach the Health Services Office no later than 4 weeks prior to the cruise to allow time for the participant to obtain and submit additional information that health services might require before clearance to sail can be granted. Please contact MOC Health Services with any questions regarding eligibility or completion of the NHSQ. Be sure to include proof of tuberculosis (TB) testing, sign and date the form, and indicate the ship or ships the participant will be sailing on. Clearances are valid for 2 years for personnel under age 50 and 1 year for age 50 and over. All PPD's expire after one year from the date of administration. The participant will receive an email notice when medically cleared to sail if a legible email address is provided on the NHSQ.

Contact information:

Regional Director of Health Services
Marine Operations Center – Atlantic
439 W. York Street
Norfolk, VA 23510
Telephone 757.441.6320

Fax 757.441.3760

E-mail: MOA.Health.Services@noaa.gov

Please make sure the medical.explorer@noaa.gov email address is cc'd on all medical correspondence.

Prior to departure, the Expedition Coordinator must provide a listing of emergency contacts to the Operations Officer for all members of the scientific party, with the following information: name, address, relationship to member, and telephone number.

Emergency contact form is included as Appendix A.

C. Shipboard Safety

Wearing open-toed footwear or shoes that do not completely enclose the foot (such as sandals or clogs) outside of private berthing areas is not permitted. Steel-toed shoes are required to participate in any work dealing with suspended loads, including CTD deployments and recovery. The ship does not provide steel-toed boots. Hard hats are also required when working with suspended loads. Work vests are required when working near open railings and during small boat launch and recovery operations. Hard hats and work vests will be provided by the ship when required.

Operational Risk Management: For every operation to be conducted aboard the ship (NOAA-wide initiative), risk management procedures will be followed. For each operation, risks will be identified and assessed for probability and severity. Risk mitigation strategies / measures will be investigated and implemented where possible. After mitigation, the residual risk will have to be assessed to make Go-No Go decisions for the operations. Particularly with new operations, risk assessment will be ongoing and updated as necessary. This does not only apply to over-the-side operations, but to everyday tasks aboard the vessel that pose risk to personnel and property.

- CTD, ROV (and other pertinent) ORM documents will be followed by all personnel working on board *Okeanos Explorer*.
- All personnel on board are in the position of calling a halt to operations/activities in the event of a safety concern.

D. Communications

A daily situation report (SITREP) on operations prepared by the Expedition Coordinator will be relayed to the program office. Sometimes it is necessary for the Expedition Coordinator to communicate with another vessel, aircraft, or shore facility. Through various modes of communication, the ship is able to maintain contact with the Marine Operations Center on an as needed basis. These methods will be made available to the Expedition Coordinator upon request, in order to conduct official business. The ship's primary means of communication with the

Marine Operations Center is via e-mail and the Very Small Aperture Terminal (VSAT) link. Standard VSAT bandwidth at 128kbs is shared by all vessels staff and the science team at no charge. Increased bandwidth in 30 day increments is available on the VSAT systems at increased cost to the scientific party. If increased bandwidth is being considered, program accounting is required it must be arranged at least 30 days in advance.

Specific information on how to contact NOAA Ship *Okeanos Explorer* and all other fleet vessels can be found at: <http://www.moc.noaa.gov/phone.htm>

Important Telephone and Facsimile Numbers and E-mail Addresses

Ocean Exploration and Research (OER):

OER Program Administration:

Phone: (301) 734-1010

Fax: (301) 713-4252

E-mail: Firstname.Lastname@noaa.gov

University of New Hampshire, Center for Coastal and Ocean Mapping

Phone: (603) 862-3438

Fax: (603) 862-0839

NOAA Ship *Okeanos Explorer* - Telephone methods listed in order of increasing expense:

Okeanos Explorer Cellular: (401) 378-7947

Okeanos Explorer Iridium: (808) 659-9179

OER Mission Iridium (dry lab) : (808) 851-3827

EX INMARSAT B

Line 1: 011-872-764-852-328

Line 2: 011-872-764-852-329

Voice Over IP (VoIP) Phone:

301-713-7772 (expect a delay once picked up by directory)

E-Mail: Ops.Explorer@noaa.gov - (mention the person's name in SUBJECT field)

expeditioncoordinator.explorer@noaa.gov - For dissemination of all hands emails by Expedition Coordinator while on board. See ET for password.

E. IT Security

Any computer that will be hooked into the ship's network must comply with the NMAO Fleet IT Security Policy prior to establishing a direct connection to the NOAA WAN. Requirements

include, but are not limited to:

1. Installation of the latest virus definition (.DAT) file on all systems and performance of a virus scan on each system.
2. Installation of the latest critical operating system security patches.
3. No external public Internet Service Provider (ISP) connections.

Completion of these requirements prior to boarding the ship is required.

Non-NOAA personnel using the ship's computers or connecting their own computers to the ship's network must complete NOAA's IT Security Awareness Course within 3 days of embarking.

F. Foreign National Guests Access to OMAO Facilities and Platforms

All foreign national access to the vessel shall be in accordance with [NAO 207-12](#) and [RADM De Bow's March 16, 2006 memo](#).

The following are basic requirements. Full compliance with [NAO 207-12](#) is required.

Responsibilities of the Expedition Coordinator:

1. Provide the Commanding Officer with the e-mail generated by the FRNS granting approval for the foreign national guest's visit. This e-mail will identify the guest's DSN and will serve as evidence that the requirements of [NAO 207-12](#) have been complied with.
2. Escorts – The Expedition Coordinator is responsible to provide escorts to comply with [NAO 207-12](#) Section 5.10, or as required by the vessel's DOC/OSY Regional Security Officer. Ensure all non-foreign national members of the scientific party receive the briefing on Espionage Indicators ([NAO 207-12](#)) at least annually or as required by the servicing Regional Security Officer.
3. Export Control - The NEFSC currently neither possesses nor utilizes technologies that are subject to Export Administration Regulations (EAR).

The Commanding Officer and the Expedition Coordinator will work together to implement any access controls necessary to ensure no unlicensed export occurs of any controlled technology onboard regardless of ownership.

Responsibilities of the Commanding Officer:

1. Ensure only those foreign nationals with DOC/OSY clearance are granted access.
2. Deny access to OMAO platforms and facilities by foreign nationals from countries controlled for anti-terrorism (AT) reasons and individuals from Cuba or Iran without written NMAO approval and compliance with export and sanction regulations.

3. Ensure foreign national access is permitted only if unlicensed deemed export is not likely to occur.
4. Ensure receipt from the Expedition Coordinator or the DSN of the FRNS e-mail granting approval for the foreign national guest's visit.
5. Ensure Foreign Port Officials, e.g., Pilots, immigration officials, receive escorted access in accordance with maritime custom to facilitate the vessel's visit to foreign ports.
6. Export Control - 8 weeks in advance of the cruise, provide the Expedition Coordinator with a current inventory of OMAO controlled technology onboard the vessel and a copy of the vessel Technology Access Control Plan (TACP). Also notify the Expedition Coordinator of any OMAO-sponsored foreign nationals that will be onboard while program equipment is aboard so that the Expedition Coordinator can take steps to prevent unlicensed export of Program controlled technology. The Commanding Officer and the Expedition Coordinator will work together to implement any access controls necessary to ensure no unlicensed export occurs of any controlled technology onboard regardless of ownership.
7. Ensure all OMAO personnel onboard receive the briefing on Espionage Indicators ([NAO 207-12](#)) at least annually or as required by the servicing Regional Security Officer.

Responsibilities of the Foreign National Sponsor:

1. Export Control - The foreign national's sponsor is responsible for obtaining any required export licenses and complying with any conditions of those licenses prior to the foreign national being provided access to the controlled technology onboard regardless of the technology's ownership.
2. The DSN of the foreign national shall assign an on-board Program individual, who will be responsible for the foreign national while on board. The identified individual must be a U.S. citizen, NOAA (or DOC) employee. According to DOC/OSY, this requirement cannot be altered.
3. Ensure completion and submission of the Certification of Conditions and Responsibilities for a Foreign National Guest as required by [NAO 207-12](#) Section 5.03.h.

Appendix A

**EMERGENCY DATA SHEET
NOAA OKEANOS EXPLORER**

PRINT CLEARLY

NAME: _____
(Last, First, Middle)

Mailing Address _____

(Other than the ship address)

Phone (Home) _____
(Cell) _____

Date of Birth _____

Email Address: _____

Emergency Contact: _____
(Name and Relationship)

E.C. Address: _____

E.C. Phone (Home) _____
(Work) _____
(Cell) _____

E.C. Email: _____

Signature _____ Date _____

Appendix B

EX-13-03 Data Management Plan

In production POC: Susan Gottfried

Appendix C

EX-13-01 Categorical Exclusion



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OCEANIC AND ATMOSPHERIC RESEARCH
Office of Ocean Exploration and Research
Silver Spring, MD 20910

MEMORANDUM FOR: The Record

FROM: John McDonough
Acting Director NOAA Office of Ocean Exploration and Research (OER)

SUBJECT: Categorical Exclusion for NOAA Ship *Okeanos Explorer* cruise EX1303

NAO 216-6, Environmental Review Procedures, requires all proposed projects to be reviewed with respect to environmental consequences on the human environment. This memorandum addresses the NOAA Ship *Okeanos Explorer*'s scientific sensors possible affect on the human environment.

Description of Project

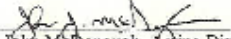
This project is part of the NOAA Office of Ocean Exploration and Research's "Science Program" and entails multi-disciplinary ocean mapping and exploration activities designed to increase knowledge of the marine environment. This project is entitled "EX1303 New England Seamount Chain Exploration" and will be lead by Adam Skarke, a physical scientist for the *Okeanos Explorer* program within OER. NOAA ship *Okeanos Explorer* will depart the Port of Davisville, Rhode Island on June 11, 2013, return to the Port of Davisville, Rhode Island on June 29, 2013, and conduct sonar mapping operations at all times during the cruise. Focused mapping and sonar testing operations will occur at offshore areas over the western New England Seamount Chain. Acoustic instruments that will be operational during the project are a 30 kHz multibeam echosounder (Kongsberg EM 302), an 18 kHz singlebeam echosounder (Kongsberg EK 60), and a 3.5 kHz sub-bottom profiler (Kongsberg Chirp 3250). Additionally, expendable bathythermographs (XBTs) will be deployed at regular intervals in association with multibeam data collection.

Effect of Projects

As expected for ocean research with limited duration or presence in the marine environment, this project will not have the potential for significant impacts. Knowledgeable experts who are aware of the sensitivities of the marine environment will conduct the at-sea portions of this project.

Categorical Exclusion

This project would not result in any changes to the human environment. As defined in Sections 5.05 and 6.03.c.3 (a) of NAO 216-6, this is a research project of limited size or magnitude or with only short-term effects on the environment and for which any cumulative effects are negligible. As such, this project is categorically excluded from the need to prepare an environmental assessment.

Signed: 
John McDonough, Acting Director

Date: 5/30/2013

